

09/145,987

FILE 'CAPLUS' ENTERED AT 06:54:23 ON 15 JUN 2004

	E NAKANISHI YUKIKO/IN,AU
L1	62 S E3-11
	E TANIGUCHI HIROKI/IN,AU
L2	111 S E3-7
	E UEDA KATAKO/IN,AU
L3	171 S E3-36
L4	343 S L1 OR L2 OR L3
L5	316350 S CELLULOSE
L6	45 S L4 AND L5
L7	481543 S ACETATE
L8	21 S L6 AND L7

L8 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:750719 CAPLUS
 DOCUMENT NUMBER: 139:278159
 TITLE: **Cellulose** esters with good releasability from supports and spinnability, their manufacture, their dopes, and moldings using them
 INVENTOR(S): Matsumura, Hiroyuki; **Taniguchi, Hiroki**; Yoneda, Kazumi; Shibata, Toru
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003268001	A2	20030925	JP 2002-74296	20020318
PRIORITY APPLN. INFO.:			JP 2002-74296	20020318

AB The **cellulose** esters are characterized in that the content of carboxyl groups is decreased by capping them. Thus, **cellulose** triacetate was treated with trimethylsilyldiazomethane to give **cellulose** triacetate Me ester showing carboxyl content 0.1 meq/100 g.

L8 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:78056 CAPLUS
 DOCUMENT NUMBER: 138:172058
 TITLE: Thermal and mechanical properties of **cellulose acetates** with various degrees of acetylation in dry and wet states
 AUTHOR(S): Asai, Tanemi; **Taniguchi, Hiroki**; Kinoshita, Emiko; Nakamura, Kunio
 CORPORATE SOURCE: Daicel Chemical Industries, LTD., Hyogo, 671-1283, Japan
 SOURCE: Recent Advances in Environmentally Compatible Polymers, International Cellucon Conference, 11th, Tsukuba, Japan, Mar. 24-26, 1999 (2001), Meeting Date 1999, 275-280. Editor(s): Kennedy, John F. Woodhead Publishing Ltd.: Cambridge, UK.
 CODEN: 69DMMW; ISBN: 1-85573-545-8
 DOCUMENT TYPE: Conference
 LANGUAGE: English
 AB The effect of sorbed water on the properties of **cellulose acetate** films with degrees of acetylation varying between 2.42 and 2.92 was studied using measurements of Tg, tensile strength, d., and sorption isotherms.
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:808874 CAPLUS
 DOCUMENT NUMBER: 138:124091
 TITLE: Effect of UV irradiation on enzymatic degradation of **cellulose acetate**
 AUTHOR(S): Ishigaki, Tomonori; Sugano, Wataru; Ike, Michihiko; **Taniguchi, Hiroki**; Goto, Tatsuo; Fujita, Masanori
 CORPORATE SOURCE: Research Center for Material Cycles and Waste Management, National Institute for Environmental Studies, Tsukuba, Ibaraki, 305-8506, Japan
 SOURCE: Polymer Degradation and Stability (2002), 78(3), 505-510
 CODEN: PDSTDW; ISSN: 0141-3910
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The effect of UV irradiation on enzymic degradation of highly substituted **cellulose acetate** (CA) was investigated. The degradability of CA by cellulase decreased with increasing the degree of substitution (DS) of CA. Combination of the deacetylating enzyme (lipase or esterase) and cellulase did not promote the degradation of CA with DS 2.4. On the other hand, the UV-irradiated CAs that were suspended in the sterilized buffer and cellulase solution showed 23% and 60% of weight loss, resp. UV irradiation resulted in the decrease of mol. weight of CA and did not affect DS. Observation by atomic force microscope confirmed that UV irradiation

increased the surface area of CA film. Wash-out of depolymd. component from UV-irradiated CA film would increase the surface area and the contactability with cellulase. These results suggested that degradation of CA by cellulase would be pos. influenced by UV irradiation under the natural environment.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:730837 CAPLUS

DOCUMENT NUMBER: 135:290353

TITLE: **Cellulose acetate** with good dope processability and process for producing the same
INVENTOR(S): Ozaki, Toru; Sasai, Hirofumi; **Taniguchi, Hiroki**; Nakai, Michiyo; Suzuki, Shinsuke

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072847	A1	20011004	WO 2001-JP2478	20010327
W: CN, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1270597	A1	20030102	EP 2001-915837	20010327
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2003092906	A1	20030515	US 2002-239628	20020920
PRIORITY APPLN. INFO.: JP 2000-86998 A 20000327				
WO 2001-JP2478 W 20010327				

AB A **cellulose acetate** is characterized by satisfying at least one requirement selected from the following requirements (A), (B), and (C), provided that the B requirement can not stand alone. Requirement (A): the number of bright foreign particles having a size of 20 μ m or larger is up to 20 per mm³. Requirement (B): the blocking constant (K) is 60 or smaller. Requirement (C): the ratio of the storage modulus (G') to the loss modulus (G'') both determined at a frequency of 0.016 Hz, G'/G'', is 0.2 or lower. A process for its manufacture comprises steps of: (A) pre-treating **cellulose** with AcOH, (B) feeding the pre-treated **cellulose** to an acetylation tank, and (B) acetylating the **cellulose** as usual where any pre-treated **cellulose** deposit adhering on the feeding path is subjected to washing with AcOH or its mixture with Ac₂O into the acetylating tank prior to acetylation for attaining the above requirements.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:658134 CAPLUS

DOCUMENT NUMBER: 133:239583

TITLE: **Cellulose acetate** with good strength

INVENTOR(S): Asai, Kazumi; **Taniguchi, Hiroki**; Shudo, Yuichiro

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000256401	A2	20000919	JP 1999-59974	19990308
PRIORITY APPLN. INFO.: JP 1999-59974 19990308				

AB The **cellulose acetate**, for preparation of fibers, films and function membranes, having Y value -1.9 and $0 \leq Y \leq -1.40$ [calculated from a formula of $Y = (-3.22 + 10-2A) + (6.47 + 10-4B) + 2.903$, wherein A = degree of acetolysis (%); B = viscosity mPa-s at 6%] is prepared Thus, reaction of **cellulose** 100, H₂SO₄ 14.2, acetic anhydride 260 and acetic acid 360 parts at 40° for 95 min, neutralization by Mg **acetate**, and maturing for 210° at

09/145,987

95° gave a product having η_{sp}/c -1.59, degree of acetylation 53.7% and viscosity 213 mPa·s.

L8 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:376851 CAPLUS
DOCUMENT NUMBER: 132:349169
TITLE: **Cellulose acetate** for moldings
with good mechanical strength
INVENTOR(S): Shudo, Yuichiro; **Taniguchi, Hiroki**; Asai,
Tanemi; Ozaki, Toru
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000154201	A2	20000606	JP 1998-329164	19981119
PRIORITY APPLN. INFO.:			JP 1998-329164	19981119
AB	Claimed is cellulose acetate (I) with average acetylation degree 55-59%, viscosity average d.p. ≥ 220 , and loss tangent ($\tan \delta$) ≥ 0.022 by dynamic viscoelasticity measurement at 25° and 1 Hz. A film made of I with average acetylation degree 57.0, average d.p. 273, and $\tan \delta$ 0.0270, showed tensile elongation (ISO1184-1983) 27% and tensile strength (ISO1184-1983) 17.2 kg/mm ² .			

L8 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:705049 CAPLUS
DOCUMENT NUMBER: 131:324028
TITLE: **Cellulose acetate propionate**
INVENTOR(S): Shuto, Yuichiro; **Taniguchi, Hiroki**
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: U.S., 12 pp., Cont.-in-part of U.S. 5,856,468.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5977347	A	19991102	US 1998-187634	19981106
JP 10045803	A2	19980217	JP 1996-216671	19960730
US 5856468	A	19990105	US 1997-902888	19970730
PRIORITY APPLN. INFO.:			JP 1996-216671	A 19960730
			US 1997-902888	A2 19970730
AB	Cellulose acetate propionate (I) is claimed having an amorphous index (Am) (formula definition given) of 0.01-0.10, a degree of acetyl substitution (DSac) and a degree of propionyl substitution (DSpr) satisfying the formulas $2.0 < \text{DSac} \leq 2.95$; $0.05 < \text{DSpr} \leq 0.8$; $2.6 < \text{DSac} + \text{DSpr} \leq 3.0$, and $1.9 < \text{DSac} - \text{DSpr}$. I is useful especially for the manufacture of photog. or optical, e.g., polarizing film.			
REFERENCE COUNT:	5	THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L8 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:631439 CAPLUS
DOCUMENT NUMBER: 131:244756
TITLE: **Cellulose ester composition**
INVENTOR(S): Shuto, Yuichiro; **Taniguchi, Hiroki**;
Nakanishi, Yukiko; Murayama, Masahiko
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 945486	A1	19990929	EP 1999-105470	19990317
EP 945486	B1	20010613		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

09/145,987

JP 11269304 A2 19991005 JP 1998-74204 19980323
 US 6139785 A 20001031 US 1999-273054 19990319
 PRIORITY APPLN. INFO.: JP 1998-74204 A 19980323

AB The present invention provides a raw material composition for producing a film excellent in optical and mech. characteristics to which the solvent-casting is applicable. Namely, the present invention provides a cellulose ester composition, comprising 1 to 99 % by weight of cellulose triacetate prepared by substituting hydroxyl groups of cellulose with acetyl and having a degree of substitution with acetyl, DSace, which satisfies the relationship: $2.7 \leq \text{DSace} \leq 3.0$, and 99 to 1 % by weight of a mixed fatty acid ester of cellulose prepared by substituting hydroxyl groups of cellulose with acetyl and acyl having three or more carbon atoms and having degrees of substitution with acetyl and the acyl having three or more carbon atoms, DSace and DSacyl, resp., which satisfy the relationships: (I) $2.20 \leq \text{DSace} \leq 2.95$, (II) $0.05 \leq \text{DSacyl} \leq 0.80$ and (III) $2.60 \leq \text{DSace} + \text{DSacyl} \leq 3.00$.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:182589 CAPLUS
 DOCUMENT NUMBER: 130:224522
 TITLE: Cellulose acetate propionate dopes and their preparation
 INVENTOR(S): Shuto, Yuichiro; Taniguchi, Hiroki
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11071464	A2	19990316	JP 1997-233504	19970829
PRIORITY APPLN. INFO.:			JP 1997-233504	19970829

AB The dopes are prepared from cellulose acetate propionate (I) satisfying $2.45 < \text{DSace} \leq 2.95$, $0.05 \leq \text{DSpro} < 0.55$, and $2.70 < \text{DSace} + \text{DSpro} \leq 3.00$ (DSace = acetylation degree; DSpro = propionylation degree) by dispersing in organic solvents, cooling down to +20 to -110°, and heating up to 0 to +120°. The dopes gel during cooling from +40° to -40° and are applicable to solvent-cast method in manufacture of its films. Thus, 15 parts I (DSace 2.72, DSpro 0.23) was mixed with 85 parts Me2CO and kept at 0° for 1 h, at a room temperature for 10 min, and at +40° for 10 min to give a uniform solution

L8 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:779480 CAPLUS
 DOCUMENT NUMBER: 130:53420
 TITLE: Cellulose acetate and dopes containing the same giving cast films with easy peeling and excellent optical properties and also for fiber spinning
 INVENTOR(S): Nakano, Yukiko; Taniguchi, Hiroki; Matsumoto, Katako
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10316701	A2	19981202	JP 1998-66501	19980317
EP 943626	A1	19990922	EP 1998-116870	19980907
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1422244	A1	20040526	EP 2004-877	19980907
R: DE, FR, GB, IT				
CN 1229088	A	19990922	CN 1998-119618	19980918
CN 1129610	B	20031203		
PRIORITY APPLN. INFO.:			JP 1997-66657	A 19970319
			JP 1998-66501	A 19980317

EP 1998-116870 A3 19980907

AB At least a portion of the carboxy groups bonded to **cellulose acetate** and/or hemicellulose **acetate** is in acid form. **Cellulose** triacetate flakes stirred with an aqueous citric acid for 1 h gave a dope cast film with yellowness index 7.0, haze 2.2, and transparency 85%, compared with 7.1, 2.6, and 78, resp., for a control prepared without immersion in the citric acid solution

L8 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:112710 CAPLUS

DOCUMENT NUMBER: 128:168913

TITLE: **Cellulose acetate** propionate, its dopes in organic solvents, and films therefromINVENTOR(S): Shudo, Yuichiro; **Taniguchi, Hiroki**

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10045803	A2	19980217	JP 1996-216671	19960730
EP 822201	A2	19980204	EP 1997-112991	19970729
EP 822201	A3	19981202		
EP 822201	B1	20031001		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

CN 1176253 A 19980318 CN 1997-118011 19970730

CN 1098862 B 20030115

US 5856468 A 19990105 US 1997-902888 19970730

US 5977347 A 19991102 US 1998-187634 19981106

PRIORITY APPLN. INFO.: JP 1996-216671 A 19960730

US 1997-902888 A2 19970730

AB The esters with good solubility in organic solvents have amorphous index (Am) ≤ 0.4 [Am = $[0.5 + \{I(2\theta = 5^\circ) + I(2\theta = 14.5^\circ)\}]/\sum I(2\theta = 5^\circ) + I(2\theta = 14.5^\circ)$] = x-ray scattering strength at Bragg angle $2\theta = 5$ and 14.5° , resp. in x-ray diffraction of a 100- μ m film obtained from the dopes and treated at 200° for 60 min; n = peak number of x-ray scattering strength at $2\theta = 5-14.5^\circ$; Pi = x-ray scattering strength of number i peak]. The films show excellent mech. strength. Thus, **cellulose** was esterified with AcOH, EtCO₂H, Ac₂O, and (EtCO)₂O at $\leq 40^\circ$ in the presence of H₂SO₄ to give **cellulose acetate** propionate, which was dissolved in CHCl₃, cast on a glass plate, and dried to give a 100- μ m film showing Am 0.08, complex elastic modulus $3.23 + 109$ Pa, storage modulus $3.23 + 109$ Pa, and tan δ 0.031.

L8 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:711075 CAPLUS

DOCUMENT NUMBER: 127:332997

TITLE: Impregnated paper for packaging with good retention of flavors of its contents

INVENTOR(S): Miyauchi, Masato; **Nakanishi, Yukio**; Miyake, Atsuko

PATENT ASSIGNEE(S): Japan Tobacco, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09279499	A2	19971028	JP 1996-89609	19960411
JP 2960008	B2	19991006		

PRIORITY APPLN. INFO.: JP 1996-89609 19960411

AB The paper useful for tobacco and cigarette packages is impregnated with glycerin esters or their mixture with carbohydrate esters. In an example, an acetone solution of **cellulose acetate** and Triacetin was used in manufacture of impregnated paper.

L8 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:456615 CAPLUS

DOCUMENT NUMBER: 127:73059
 TITLE: Ink-jet printing receptor with uppermost layer containing **cellulose**
 INVENTOR(S): **Taniguchi, Hiroki**; Nishimura, Kyo
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09164760	A2	19970624	JP 1995-328678	19951218

PRIORITY APPLN. INFO.: JP 1995-328678 19951218

AB The title sheet comprises a support coated with ≥ 1 ink-receptive layers of which the uppermost layer contains fine particle-like and/or fine fibrous **cellulose**. The sheet shows high ink absorbing speed, good coloring properties, and coating strength. Thus, a PET film was coated with a composition containing modified poly(vinyl **acetate**) and **cellulose** fine particles to give an ink jet printing receptor.

L8 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1997:262185 CAPLUS
 DOCUMENT NUMBER: 126:249001
 TITLE: Biodegradable filter for tobacco smoking
 INVENTOR(S): **Taniguchi, Hiroki**; Nishimura, Kyo
 PATENT ASSIGNEE(S): Daicel Chem, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09047273	A2	19970218	JP 1995-200764	19950807

PRIORITY APPLN. INFO.: JP 1995-200764 19950807

AB The biodegradable filter containing **cellulose** ester fiber bundles (3-1000) along the long axis of the filter is bound together with a water-soluble polymer. The biodegradable filter can be easily disintegrated with rain and/or water.

L8 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1997:261864 CAPLUS
 DOCUMENT NUMBER: 126:236224
 TITLE: Adhesive hydrolyzed **cellulose** esters, tobacco tip filters, and their manufacture
 INVENTOR(S): **Taniguchi, Hiroki**; Nishimura, Kyo
 PATENT ASSIGNEE(S): Daicel Chem, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09048801	A2	19970218	JP 1995-200765	19950807

PRIORITY APPLN. INFO.: JP 1995-200765 19950807

AB **Cellulose** esters are hydrolyzed at least on a part of the surface by wetting with water, molded, dried. The tobacco tip filters are manufactured by adding water to **cellulose** esters, (hydrolyzing), molding to give filter rods, and removing water from the rods. The filters show good degradability in water and thus prevent environmental pollution. Thus, 100 g **cellulose acetate** powders are soaked in 0.2 N NaOH solution, washed with water, and dried to give powders having hydrolyzed surfaces, 10 parts of which was sprayed with 5 parts water and hot-pressed to give a sheet.

L8 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1996:689491 CAPLUS
 DOCUMENT NUMBER: 125:303614
 TITLE: **Cellulose acetate** having high moldability and process for preparing the same

INVENTOR(S): Murakami, Ko; Okano, Toshinori; **Taniguchi, Hiroki**; Kiyose, Atsunobu; Shimamoto, Shu
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9630413	A1	19961003	WO 1996-JP862	19960329
W: CN, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 08337601	A2	19961224	JP 1996-62602	19960319
EP 763544	A1	19970319	EP 1996-907722	19960329
EP 763544	B1	20030924		
R: BE, DE, FR, GB, IT				
CN 1154118	A	19970709	CN 1996-190517	19960329
CN 1078594	B	20020130		
US 5919920	A	19990706	US 1996-750183	19961121
US 5962677	A	19991005	US 1998-169473	19981009
PRIORITY APPLN. INFO.:			JP 1995-100711	A 19950331
			JP 1995-85550	A 19950411
			WO 1996-JP862	W 19960329

AB A cellulose acetate which, despite the high average d.p., has a low solution viscosity and a high moldability. The low-mol.-weight fraction of cellulose acetate (such as CTA having an average degree of acetylation of 59.0-62.5%) is eluted with a washing solvent to prepare cellulose acetate having a mol. weight distribution Mw/Mn of 1-1.7. The washing solvent may be any solvent capable of swelling or partially dissolving cellulose acetate, for example, a solvent capable of dissolving 0.1-30% by weight of cellulose acetate. Examples of such solvents include ones having a solubility parameter δ of 7-12.5 (such as ketones, ethers, organic acids, and esters).

L8 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1996:689490 CAPLUS
 DOCUMENT NUMBER: 125:303613
 TITLE: Cellulose acetate having excellent physical strength and process for preparing the same
 INVENTOR(S): Kiyose, Atsunobu; Shimamoto, Shu; Shuto, Yuichiro; **Taniguchi, Hiroki**
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9630412	A1	19961003	WO 1996-JP861	19960329
W: CN, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 09188701	A2	19970722	JP 1996-62603	19960319
EP 769500	A1	19970423	EP 1996-907721	19960329
EP 769500	B1	20030219		
R: BE, DE, FR, GB, IT				
CN 1154119	A	19970709	CN 1996-190518	19960329
US 5914397	A	19990622	US 1996-750182	19961121
US 5990304	A	19991123	US 1998-169472	19981009
PRIORITY APPLN. INFO.:			JP 1995-100710	A 19950331
			JP 1995-85551	A 19950411
			JP 1995-292668	A 19951110
			JP 1996-62603	A 19960319
			WO 1996-JP861	W 19960329

AB The cellulose acetate provides moldings improved in the properties, particularly film strength and pliability. The cellulose acetate has an average degree of acetylation of $\geq 59\%$, a viscosity-average degree of polymerization (DP) of ≥ 290 , and a viscosity (η), as measured in the form of a concentrated solution thereof by the falling-ball method, satisfying a requirement for the relationship with the viscosity-average degree of polymerization (DP) represented by the following formula: $2.814 + \ln(DP) - 11.753 \leq \ln(\eta) \leq 7.28$

+ ln(DP) - 37.059.

L8 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1995:967194 CAPLUS
 DOCUMENT NUMBER: 124:5164
 TITLE: Preparation of cigarette filter free of acetic acid
 off-odor
 INVENTOR(S): Arino, Yuriko; Taniguchi, Hiroki
 PATENT ASSIGNEE(S): Daicel Chem, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07213270	A2	19950815	JP 1994-12680	19940204
JP 3342763	B2	20021111		
US 5728462	A	19980317	US 1994-357661	19941216

PRIORITY APPLN. INFO.: JP 1994-12680 A 19940204

AB The title cigarette filter is prepared from cellulose diacetate and contains metal salt of acids 80-10,000 ppm. The acids are selected from carboxylic acids and inorg. acids, and the metals are multivalent metal ions. The cigarette filter prevents the formation of off-odor, and has excellent shelf life.

L8 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1993:236185 CAPLUS
 DOCUMENT NUMBER: 118:236185
 TITLE: Manufacture of cellulose acetate
 from low-grade pulps using water
 INVENTOR(S): Taniguchi, Hiroki; Kaino, Yoshiaki; Iwata, Ryota
 PATENT ASSIGNEE(S): Daicel Chemical Industries Ltd., Japan
 SOURCE: Brit. UK Pat. Appl., 24 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2257142	A1	19930106	GB 1992-13851	19920630
GB 2257142	B2	19940309		
JP 05009201	A2	19930119	JP 1991-161579	19910702
JP 2999293	B2	20000117		
FR 2678625	A1	19930108	FR 1992-8173	19920702
FR 2678625	B1	19950707		
CN 1068336	A	19930127	CN 1992-105324	19920702
CN 1036851	B	19971231		
US 5451672	A	19950919	US 1993-135329	19931012

PRIORITY APPLN. INFO.: JP 1991-161579 A 19910702
 US 1992-904444 B1 19920625

AB Cellulose acetate (I) is manufactured from low-grade wood pulp sheets (having α -cellulose content $\leq 93\%$) by disintegrating the pulp in the presence of $\leq 40\%$ (based on 100 parts oven-dry pulp) water, followed by activation, acetylation, saponification, and aging. The secondary I showed excellent filterability and spinnability.

L8 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1992:257706 CAPLUS
 DOCUMENT NUMBER: 116:257706
 TITLE: Jet-mill for defibration of cellulose stock
 of low α -cellulose content in its
 acetylation
 INVENTOR(S): Taniguchi, Hiroki
 PATENT ASSIGNEE(S): Daicel Kagaku Kogyo K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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09/145,987

JP 04065401 A2 19920302 JP 1990-178635 19900705
PRIORITY APPLN. INFO.: JP 1990-178635 19900705

AB The title mill, adaptable into the 2-stage process comprising activation-acetylation and saponification-aging stages using pulp sheets of d. ≥ 0.5 g/cm³, has a cylindrical shape and is lined with liner, and equipped with circular plates and propeller blades centered on the mill axis in an alternate order, wherein the high-speed rotary motion of the plates and blades propels and projects pulp on liner, and by the combined impact effects of above, pulp sheets are defibrated under the influence of high-frequency pressing and vibration.

L8 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1991:166623 CAPLUS

DOCUMENT NUMBER: 114:166623

TITLE: Mechanical defibration of low-alpha-cellulose
pulp sheets for acetylation

INVENTOR(S): Taniguchi, Hiroki; Kaino, Yoshiaki; Iwata,
Ryota

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02311501	A2	19901227	JP 1989-133658	19890526
PRIORITY APPLN. INFO.:		JP 1989-133658	19890526	

AB The defibration of tough low- α - cellulose pulp sheets is improved by carrying out in presence of 10-200 phr water. The defibrated pulp is then preactivated, acetylated, saponified and aged, reacetylated, saponified and aged to give the cellulose acetate.